## 4.13 VISUAL RESOURCES

Information contained in this section is based on the *SR-22/West Orange County Connection Visual Impact Assessment* (December 2000) and the *Reduced Build Alternative Visual Impact Assessment Addendum* (December 2000) (under separate cover).

# 4.13.1 Visual Impacts at Key Viewpoints

# A. NO BUILD ALTERNATIVE

The No Build Alternative assumes that no improvements would be made to the existing area beyond those already planned and approved. No additional impacts at key viewpoints would occur.

## B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

The TSM/Expanded Bus Service Alternative would not include any major capital improvements at the key viewpoints. Negligible impacts at key viewpoints would occur.

## C. FULL BUILD ALTERNATIVE

<u>Suburban Landscape Unit</u>. Figure 4.13-1 includes a visual simulation of how the key viewpoint for the Suburban Landscape Unit would appear under the Full Build Alternative. At the Suburban Key Viewpoint, all the homes on the north side of the street (those in the view) would be removed and replaced with a minimally maintained open space slope, topped with a noise barrier. Elements that currently screen the freeway from view, such as the houses and some of the landscaping, would be removed, exposing the fill slope, noise barrier, and signage to view.

With the loss of homes and landscaping and the new direct views of freeway elements, vividness, intactness, and unity would be dramatically affected at this key viewpoint. Vividness would drop from the existing high rating to moderately low, due to the removal of the homes and landscaping. This removal would also cause intactness to drop from moderate to low. Unity would drop from high to low since this previously unified neighborhood with houses on both sides of the street would now have houses on one side (behind the viewer in the picture) and a freeway on the other side. Overall, visual quality would drop from moderately high to low, a high level of adverse visual quality change.

Visual impact is more than the change in visual quality. It is also dependent upon the perception of this change by the viewers. At the Suburban Key Viewpoint, the viewers are almost exclusively residents, and most of them homeowners. As explained in Section 3.13, residents are among the most sensitive viewers to visual quality change. This is because of the large amount of time they spend at the viewpoint, their familiarity with the view, and their sense of ownership. Thus, the combination of the high and adverse visual quality change and the higher-than-average viewer sensitivity to visual quality change results in a very high and adverse visual impact.

The Suburban Key Viewpoint represents one of the most adverse visual impacts that would result from implementation of the Full Build Alternative. There are a few other neighborhoods in the Suburban Landscape Unit where both houses and landscaping would be removed and similar impacts would occur. In many other neighborhoods bordering the project freeways, widening of the roadway would require removal of the majority of the dense landscaping, often replacing it with a noise barrier. This change from a soft, landscaped edge with a hard-surface edge would also represent a substantial visual impact.

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<sup>&</sup>lt;sup>1</sup> For this analysis, it is assumed that the landscaping included in the project would be the minimum necessary to control erosion. Noise barriers are assumed at the locations identified in the Preliminary Noise Abatement Decision (Section 4.9).



Existing



Proposed: Full Build Alternative

SR-22 / West Orange County Connection Project Suburban Key Viewpoint - Existing and Full Build Alternative View

# Figure 4.13-1

<u>Urban Landscape Unit</u>. Figure 4.13-2 includes a visual simulation of how the key viewpoint for the Urban Landscape Unit would appear under the Full Build Alternative. At the Urban Key Viewpoint,

the view with the Full Build Alternative is one of a re-aligned major interchange and surface streets, as well as a widened freeway. Much of the landscaping associated with the existing loop road would be removed. Metropolitan Drive, the roadway surrounding the parking lot, would be relocated and would act as the collector road for traffic entering or exiting SR-22. Some parking would be removed. New elevated structures would be visible, carrying traffic from I-5 and SR-57 onto the westbound SR-22. This connector would require the removal of medium-rise office buildings just off camera to the far left of this viewpoint. Just off camera to the right, a row of duplexes would also be removed to allow widening of the eastbound SR-22 lanes. A new noise barrier is assumed at this location, based on the Preliminary Noise Abatement Decision.

The loss of buildings and landscaping at this location would result in a slight change in visual quality. There would be a slight reduction in intactness and unity (from high to moderately high), but vividness, which is a product of the expansiveness of the view more than anything, would be unaffected. Overall, visual quality would drop from high to moderately high, a low level of adverse visual quality change.

Viewers at the Urban Key Viewpoint are mostly office workers. These workers, on average, have a moderate sensitivity to visual quality change. While some workers may spend a considerable amount of time looking out the window, most activity in these buildings is oriented inward. Thus, the combination of a low level of adverse visual quality change and a moderate level of viewer sensitivity would result in a low level of adverse visual quality change.

The Urban Key Viewpoint represents one of the most extensive views of the Full Build Alternative that would be available. Most offices are less than nine stories tall, and few of the taller buildings have such an unobstructed view of the freeways. Elsewhere in the Urban Landscape Unit, viewers are on lower floors or in buildings without windows overlooking the freeway. Therefore, most viewers in the Urban Landscape Unit would experience an even lower level of visual impact.

Open Landscape Unit. Figure 4.13-3 includes a visual simulation of how the key viewpoint for the Open Landscape Unit would appear under the Full Build Alternative. At the Open Key Viewpoint, physical changes after construction would include widening of the bridge and freeway, moving it closer to the viewer, removal of buildings on the far side of the Santa Ana River near the freeway, and removal of the billboard in this same location. These changes would result from the realignment and widening of the Bristol Street/La Veta Avenue off-ramp and the eastbound SR-22 connector to southbound I-5. This widening would not remove an appreciable amount of green space because the bridge widening would occur in the part of the river that has no vegetation. There would be no noise barriers in this location.

Because of the scale of the existing freeway elements, the widening and realignment visible at this location would result in no measurable change in vividness, intactness, and unity of this view. Overall, visual quality would remain moderately high. The most noticeable change would be a positive one from a visual perspective – the removal of the billboard.

Viewers at this location are typically highly sensitive to visual changes. For the most part, these viewers are engaged in some form of recreation, whether on the trails or the golf course, where visual quality is an important factor. However, with minimal visual quality change, the high sensitivity of this viewer group would result in a negligible visual impact.

The Open Key Viewpoint is located in one of the few places in the Open Landscape Unit where the general public is allowed. Access by the general public is restricted in many other locations elsewhere in this landscape unit. Thus, with fewer viewers, impacts elsewhere in this landscape unit would be negligible.



Existing



Proposed: Full Build Alternative

SR-22 / West Orange County Connection Project
Urban Key Viewpoint - Existing and Full Build Alternative View
Figure 4.13-2



Existing



Proposed: Full Build Alternative

SR-22 / West Orange County Connection Project
Open Key Viewpoint - Existing and Full Build Alternative View
Figure 4.13-3

<u>View From the Freeway</u>. Figure 4.13-4 includes a visual simulation of how the View From the Freeway would appear under the Full Build Alternative. At this location, visible physical changes would include total removal of landscaping, wider areas of pavement, and the addition of a noise barrier (based on the Preliminary Noise Abatement Decision). Since the freeway is elevated at this location, the noise barrier is assumed to be at the edge of pavement, as necessary to be effective in noise abatement.

The total removal of landscaping and the addition of additional hard surfaces would result in changes to visual quality elements. Vividness, which was rated at moderate under the existing condition, would drop to moderately low. The greatest change would be to intactness, which would drop from moderate to very low. Unity, which was rated at high due to the unifying quality of the adjacent landscaping, would drop from high to moderate. Overall, visual quality at the View From the Freeway viewpoint would drop from moderately high to moderately low, a high level of adverse visual quality change.

Viewers at this location have average sensitivity to visual quality change. All of them are motorists (drivers or passengers). The combination of average sensitivity with a high level of adverse visual quality change would result in a high and adverse visual impact.

The simulation illustrated in Figure 4.13-4 is very representative of the type of impacts that would occur throughout the Full Build Alternative, with the removal of landscaping and additional pavement and noise barriers common. Thus, this type of high and adverse visual impact would be common throughout the alternative. See Section 4.13-5 for further discussion.

## D. REDUCED BUILD ALTERNATIVE

<u>Suburban Landscape Unit</u>. Figure 4.13-5 includes a visual simulation of how the key viewpoint for the Suburban Landscape Unit would appear under the Reduced Build Alternative. At the Suburban Key Viewpoint, very few changes would be visible. Although there would be a small amount of widening of SR-22 in this location, the existing homes and landscaping would remain. This is one of the primary differences between the Full Build and Reduced Build Alternatives. Since no SR-22 to I-5 direct HOV connectors are included in this alternative, the extra widening that would remove the houses and landscaping in the Full Build Alternative would not be required.

Since there would be essentially no physical changes visible at this location, there would be no change to vividness, intactness, or unity. Overall, the moderately high visual quality would remain.

At the Suburban Key Viewpoint, the viewers are almost exclusively residents, and most of them homeowners. Residents are among the most sensitive viewers to visual quality change. The combination of no visual quality change and the higher-than-average viewer sensitivity to visual quality change would result in no visual quality impact.

The Suburban Key Viewpoint demonstrates one of the few areas where the visual impact under the Reduced Build Alternative would differ from the Full Build Alternative. Because the Reduced Build Alternative was developed to reduce impacts related to the removal of houses, there would be relatively few areas where the type of impacts associated with the Full Build Alternative at the Suburban Key Viewpoint would occur. In many other neighborhoods bordering the project freeways, however, widening of the roadway would require removal of the majority of the dense land-scaping, often replacing it with a noise barrier. This change from a soft, landscaped edge to a hard-surface edge would also represent a potentially substantial visual impact.

<u>Urban Landscape Unit</u>. Figure 4.13-2, under the discussion of the Full Build Alternative, includes a visual simulation of how the key viewpoint for the Urban Landscape Unit would appear under the Full Build Alternative, which is very similar to that under the Reduced Build Alternative.



Existing



Proposed: Full Build Alternative

SR-22 / West Orange County Connection Project
View From the Freeway - Existing and Full Build Alternative View
Figure 4.13-4



Existing



Proposed:
Reduced
Build
Alternative

SR-22 / West Orange County Connection Project Suburban Key Viewpoint - Existing and Reduced Build Alternative View

Figure 4.13-5

Although the configuration of this interchange would differ slightly under the Reduced Build Alternative, the overall view would be very similar to what is shown in the simulation. At the Urban Key

Viewpoint, the view with the Reduced Build Alternative is one of a re-aligned major interchange and surface streets, as well as a widened freeway. Much of the landscaping associated with the existing loop road would be removed. Metropolitan Drive, the roadway surrounding the parking lot, would be relocated and would act as the collector road for traffic entering or exiting SR-22. Some parking would be removed. New elevated structures would be visible, carrying traffic from I-5 and SR-57 onto the westbound SR-22. This connector would require the removal of mediumrise office buildings just off camera to the far left of this viewpoint. (Note: The duplexes that would be removed off camera to the right under the Full Build Alternative would remain under the Reduced Build Alternative. A new noise barrier is anticipated at this location, based on the Preliminary Noise Abatement Decision.)

The loss of buildings and landscaping at this location would result in a slight change in visual quality. There would be a slight reduction in intactness and unity (from high to moderately high), but vividness, which is a product of the expansiveness of the view more than anything, would be unaffected. Overall, visual quality would drop from high to moderately high, a low level of adverse visual quality change.

Viewers at the Urban Key Viewpoint are mostly office workers. These workers, on average, have a moderate sensitivity to visual quality change. While some workers may spend a considerable amount of time looking out the window, most activity in these buildings is oriented inward. Thus, the combination of a low level of adverse visual quality change and a moderate level of viewer sensitivity would result in a low level of adverse visual quality change.

The Urban Key Viewpoint represents one of the most extensive views of the Reduced Build Alternative that would be available. Most offices are less than nine stories tall, and few of the taller buildings have such an unobstructed view of the freeways. Elsewhere in the Urban Landscape Unit, viewers are on lower floors or in buildings without windows overlooking the freeway. Therefore, most viewers in the Urban Landscape Unit would experience an even lower level of visual impact.

Open Landscape Unit. Figure 4.13-3, under the Full Build Alternative, includes a visual simulation of how the key viewpoint for the Open Landscape Unit would appear under the Full Build Alternative, which is very similar to that under the Reduced Build Alternative. Although the reconfiguration of the interchange visible in this simulation would differ slightly under the Reduced Build Alternative, the overall view would be very similar to what is shown in the simulation. At the Open Key Viewpoint, physical changes after construction would include widening of the bridge and freeway, moving it closer to the viewer, but not the removal of buildings on the far side of the Santa Ana River near the freeway nor the removal of the billboard as shown in the simulation. This widening would not remove an appreciable amount of green space because the bridge widening would occur in the part of the river that has no vegetation. There would be no noise barriers in this location.

Because of the scale of the existing freeway elements, the widening and realignment visible at this location would result in no measurable change in vividness, intactness, and unity of this view. Overall, visual quality would remain moderately high.

The recreational viewers at this location are typically highly sensitive to visual changes. However, with minimal visual quality change, the high sensitivity of this viewer group would not result in a substantial visual impact.

The Open Key Viewpoint is located in one of the few places in the Open Landscape Unit where the general public is allowed. Access by the general public is restricted in many other locations elsewhere in this landscape unit. Thus, with fewer viewers, impacts elsewhere in this landscape unit would be negligible.

<u>View From the Freeway</u>. Figure 4.13-4, under the Full Build Alternative, includes a visual simulation of how the View From the Freeway would appear under the Full Build Alternative, which would be identical to that under the Reduced Build Alternative. At this location, visible physical changes would include total removal of landscaping, wider areas of pavement, and the addition of a noise barrier (based on the Preliminary Noise Abatement Decision). Because the freeway is elevated at this location, the noise barrier is assumed to be at the edge of pavement, as necessary to be effective in noise abatement.

The total removal of landscaping and the addition of additional hard surfaces would result in changes to visual quality elements. Vividness, which was rated as moderate under the existing condition, would drop to moderately low. The greatest change would be to intactness, which would drop from moderate to very low. Unity, which was rated at high due to the unifying quality of the adjacent landscaping, would drop from high to moderate. Overall, visual quality at the View From the Freeway viewpoint would drop from moderately high to moderately low, a high level of adverse visual quality change.

Viewers at this location have average sensitivity to visual quality change. All of them are motorists (drivers or passengers). The combination of average sensitivity with a high level of adverse visual quality change would result in a high and adverse visual impact.

The simulation illustrated in Figure 4.13-4 is very representative of the type of impacts that would occur throughout the Reduced Build Alternative, with the removal of landscaping and additional pavement and noise barriers common. Thus, this type of high and adverse visual impact would be common throughout the alternative. The loss of landscaping is further discussed in Section 4.13-5.

# Thresholds of Significance for CEQA:

Reduction of visual quality in residential neighborhoods from home loss and landscaping

#### A. NO BUILD ALTERNATIVE

The No Build Alternative would have no significant impacts at key viewpoints.

# B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

The TSM/Expanded Bus Service Alternative would not include any major capital improvements at the key viewpoints. No significant impacts at key viewpoints are anticipated to occur.

## C. FULL BUILD ALTERNATIVE

With the loss of homes, landscaping, and the new direct views of freeway elements, visual quality would be dramatically affected in residential neighborhoods. It is anticipated that there would be potentially significant impacts to visual quality in residential neighborhoods.

#### D. REDUCED BUILD ALTERNATIVE

With the Reduced Build Alternative developed to reduce impacts related to the removal of houses and landscaping, there would be relatively few areas where the visual impacts will significantly lower the visual quality residential neighborhoods. It is anticipated that the visual impacts to residential neighborhoods would be less than significant.

#### 4.13.2 New Public Views

If a project provides access – physically or visually – to new areas, new public views are created. The potential for new views are provided below.

## A. NO BUILD ALTERNATIVE

The No Build Alternative does not include construction other than that addressed in previous environmental documents. No new views would be created.

#### B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

The TSM/Expanded Bus Service Alternative would not create new views.

## C. FULL BUILD ALTERNATIVE

New views would be provided for motorists using the arterial in the former Pacific Electric right-of-way. Currently, this right-of-way is not generally open to the public, and is often located at the back of parcels not generally visible to the public. From the new arterial, especially at locations where it is elevated, motorists would have a view of a variety of adjacent land uses. Much of the surrounding area is industrial and the views in this area would be mostly of the back of these industrial properties. The view would also include the Willowick Golf Course and the Santa Ana River. In some areas, views of the surrounding land uses would be blocked by noise barriers.

#### D. REDUCED BUILD ALTERNATIVE

The Reduced Build Alternative includes primarily highway widening and alteration of existing interchanges. Some new views of the freeway as well as new views from the freeway would be created as a result of these activities.

# Thresholds of Significance for CEQA:

- Reduction of visual quality related to views of the freeway
- · Reduction of visual quality related to views from the freeway

## A. NO BUILD ALTERNATIVE

The No Build Alternative would have no significant impacts to views of or from the freeway.

#### B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

The TSM/Expanded Bus Service Alternative would have no significant impacts to views of or from the freeway.

## C. FULL BUILD ALTERNATIVE

New views would be created through out the proposed arterial on the former Pacific Electric rightof-way which are not currently visible to the public. Motorist would have a new view of the backs of parcels and a variety of adjacent land uses. The new views related to the Full Build Alternative are anticipated to be potentially significant.

## D. REDUCED BUILD ALTERNATIVE

The new views would be created due to the construction of sound barriers which will alter the views of drivers traveling on the freeway and will also create new views of the freeway for the public. The new views related to the Reduced Build Alternative are anticipated to be potentially significant.

# 4.13.3 Visual Impacts at Important Visual Resources

Important visual resources include areas where the visual environment is particularly important to the function of the land use. In the SR-22/West Orange County Connection study area, these include parks, recreational areas, trails, and historic properties.

#### A. NO BUILD ALTERNATIVE

The No Build Alternative does not include construction other than that addressed in previous environmental documents. There would be no impacts to important visual resources.

## B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

The TSM/Expanded Bus Service Alternative would not include construction in the vicinity of important visual resources. There would be no impacts to important visual resources.

## C. FULL BUILD ALTERNATIVE

Table 4.13-1 lists the important visual resources where physical changes under the Full Build Alternative would result in substantial visual impacts. As shown in the table, the result of the implementation of this alternative would be a decrease in visual quality at eight of these resources and the elimination of two others. At Almond Park and Eldridge Park, removal of nearby houses would result in a substantial and adverse visual impact if the resulting open space were not well maintained. At Garden Grove Park, Bolsa Grande High School, and the Pacific Electric Commemorative Area, the removal of mature screening vegetation and its replacement with noise barriers would represent a substantial and adverse visual impact. Trails would be affected in two locations. The Santa Ana River Trail would be severed in up to three locations if grade-separated crossings were not provided. The proposed Pacific Electric Trail would be precluded completely. Both of these impacts would be substantial, not just to their visual quality but to their utility. (See Sections 4.10 and 9.0 for a discussion of these impacts.) At both the Willowick Municipal Golf Course and the play areas for Spurgeon Intermediate School, the placement of an arterial in the open space represented by the former Pacific Electric right-of-way would have a substantial visual impact. At the golf course, there would most likely be an additional visual impact from protective fencing that would be needed to prevent golf balls from landing on the arterial. At the school, the visual impact would also include severing views of the additional agricultural open space north of the right-of-way. Finally, the impacts to the one cultural resource in the viewshed, the Pacific Electric Santa Ana River Bridge, goes beyond mere visual impacts by removing this historic bridge altogether. (See Sections 4.5 and 9.0 for a discussion of this impact.)

#### D. REDUCED BUILD ALTERNATIVE

Table 4.13-2 lists the important visual resources where physical changes under the Reduced Build Alternative would result in substantial visual impacts. As shown in the table, the result of the implementation of this alternative would be a decrease in visual quality at four of these resources. At Almond Park, removal of nearby houses would result in a substantial and adverse visual impact if the resulting open space were not well maintained. At Garden Grove Park and Bolsa Grande High School, the removal of mature screening vegetation and its replacement with noise barriers would represent a substantial and adverse visual impact. The Santa Ana River Trail would be affected, potentially severed in up to two locations if grade-separated crossings were not provided. This impact would also affect the trail's use. (See Sections 4.10 and 9.0.)

# Thresholds of Significance for CEQA:

Impacts to the continuity of trails

#### A. NO BUILD ALTERNATIVE

The No Build Alternative would have no significant impact to trails.

#### B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

The TSM/Expanded Bus Service Alternative would have no significant impacts to trails.

#### C. FULL BUILD ALTERNATIVE

Trails would be affected in two locations. The Santa Ana River Trail would be severed in up to three locations if grade-separated crossings were not provided. The proposed Pacific Electric Trail would be precluded completely. Both of these impacts would be significant not just to their visual quality but to their utility. However, if mitigation is implemented for the Santa Ana River Trail, the impacts to this resource would be less that significant (see VIS-FB-8).

#### D. REDUCED BUILD ALTERNATIVE

The Santa Ana River Trail would be affected, potentially severed in up to two locations if grade-separated crossings were not provided. This impact would also significantly affect the trail's use. If mitigation measures are implemented, the impacts to the trail would be less than significant (see VIS-RB-8).

## 4.13.4 Visual Policy Document Consistency

Policy documents of the seven cities and the County of Orange within the SR-22/West Orange County Connection viewshed include areas classified as scenic resources, visual resources, aesthetic assets, open space, and other similar designations. In addition, various local jurisdictions, as well as Caltrans, have policies about visual quality in the viewshed. These policies are too numerous to list here, but the policy documents are listed in Table 4.13-3 and the discussions that follow identify any conflict with policies within these documents. (All of the policies are discussed in the SR-22/West Orange County Connection Visual Impact Assessment in Appendix K) There are no scenic highways identified by the state in the viewshed.

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<sup>&</sup>lt;sup>2</sup> Local policy documents cited herein are available at OCTA.

# Table 4.13-1 IMPACTS TO IMPORTANT VISUAL RESOURCES FULL BUILD ALTERNATIVE

Important Visual Resource	Existing Visual Quality	Description of Visible Changes	Proposed Visual Quality
	•	Parks	·
Almond Park	high	Removal of houses, with one across the street from the park, to accommodate realigned frontage road; resulting open space would be visible and might not be maintained.	moderately high
Garden Grove Park	high	Removal a screening vegetation, including mature trees, to accommodate widening of SR-22; replacement with noise barrier, introducing a hard surface in place of landscaping.	Moderate
Eldridge Park	high	Removal of houses, with one across the street from the park, to accommodate realigned frontage road; resulting open space would be visible and might not be maintained.	moderately high
		Trails	
Santa Ana River Trail	high	Widening of SR-22 overcrossing of trail. Two new structures crossing (and potentially severing) trail north of SR-22 (I-5/SR-57 connector to SR-22 and SR-57 to Metropolitan Drive off-ramp) – potentially severing trail. New structure crossing (and potentially severing) trail for Pacific Electric Arterial. Removal of businesses and billboards visible from trail.	if severed, low; also would impact use
Pacific Electric Trail (proposed)	moderate	Total displacement of proposed trail by Pacific Electric Arterial.	not appli- cable; re- source pre- cluded
		Other Recreational Facilities	
Bolsa Grande High School	high	Removal a screening vegetation, including mature trees, to accommodate widening of SR-22; replacement with noise barrier, introducing a hard surface in place of landscaping.	Moderate
Pacific Electric Railway Com- memorative Area	moderate	Removal of large amount of screening vegetation for widening of SR-22 and for Pacific Electric Arterial on-ramp.	moderately low
Willowick Munici- pal Golf Course	high	New Pacific Electric Arterial in open space corridor adjacent to golf course; probably requirement for protective fencing to prevent wayward golf balls from landing in adjacent arterial; arterial would be elevated near eastern end of golf course.	moderately high
Spurgeon Intermediate School	moderate	New elevated Pacific Electric Arterial and Civic Center Drive off-ramp in open space corridor adjacent to school play areas; severing of view to additional agricultural open space north of right-of-way.	moderately low
Cultural Resources			
Pacific Electric Santa Ana River Bridge	moderately high	Removal of bridge.	not appli- cable; resource removed

# Table 4.13-2 IMPACTS TO IMPORTANT VISUAL RESOURCES REDUCED BUILD ALTERNATIVE

Important Visual Resource	Existing Visual Quality	Description of Visible Changes	Proposed Visual Quality
		Parks	
Almond Park	high	Removal of houses, with one across the street from the park, to accommodate realigned frontage road; resulting open space would be visible and might not be maintained.	moderately high
Garden Grove Park	high	Removal of screening vegetation, including mature trees, to accommodate widening of SR-22; replacement with noise barrier, introducing a hard surface in place of landscaping.	Moderate
		Trails	
Santa Ana River Trail	high	Widening of SR-22 overcrossing of trail. Two new structures crossing (and potentially severing) trail north of SR-22 (I-5/SR-57 connector to SR-22 and SR-57 to Metropolitan Drive off-ramp) – potentially severing trail.	if severed, low; also would impact use
Other Recreational Facilities			
Bolsa Grande High School	high	Removal a screening vegetation, including mature trees, to accommodate widening of SR-22; replacement with noise barrier, introducing a hard surface in place of landscaping.	Moderate

Table 4.13-3
VISUAL POLICY DOCUMENTS APPLICABLE TO THE VIEWSHED

Agency	Documents
Orange County	<ul> <li>Master Plan of Freeway and Transit Corridor Enhancements (December 1995)</li> <li>Orange County Commuter Bikeways Strategic Plan (May 1995)</li> <li>Resources Element of the Orange County General Plan (April 1994)</li> </ul>
Los Alamitos	Los Alamitos General Plan (1980)
Seal Beach	<ul> <li>Seal Beach General Plan – Scenic Highways Element (1975)</li> <li>Seal Beach General Plan – Open Space/Recreation/Conservation Element (October 1997)</li> </ul>
Westminster	• 1996 General Plan (March 1996)
Garden Grove	City of Garden Grove General Plan (October 1995)     Harbor Corridor Specific Plan (April 1990)
Santa Ana	<ul> <li>Revised Draft Urban Design Element of the Santa Ana General Plan (June 1998)</li> <li>Circulation Element of the Santa Ana General Plan (February 1998)</li> <li>Final North Harbor Specific Plan (1992)</li> </ul>
Orange (City)	City of Orange General Plan (August 1989) The City Center Mills Specific Plan (1996)
Tustin	Tustin General Plan (February 1994)
Caltrans	<ul> <li>Project Development Procedures Manual, Chapter 29, Landscape Architecture (updates through June 3, 2000)</li> <li>Plant Setback Spacing Guide (updates through June 3, 2000)</li> <li>Highway Design Manual, Chapter 900, Landscape Architecture (updates through June 3, 2000)</li> </ul>

# A. NO BUILD ALTERNATIVE

The No Build Alternative does not include construction other than that addressed in previous environmental documents. There would be no impacts to visual resources identified in policy documents. Because there would be no changes to SR-22, there would also be no opportunity to enhance the freeway, as called for in several policy documents, including the Orange County Master Plan of Freeway and Transit Corridor Enhancements, the City of Garden Grove General Plan, the Revised Draft Urban Design Element of the Santa Ana General Plan, and the City of Orange General Plan.

## B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

The TSM/Expanded Bus Service Alternative would not include construction in the vicinity of visual resources identified in policy documents. There would be no impacts to visual resources identified in policy documents. Because there would be no changes to the SR-22, there would also be no opportunity to enhance the freeway, as called for in several policy documents, including the Orange County Master Plan of Freeway and Transit Corridor Enhancements, the City of Garden Grove General Plan, the Revised Draft Urban Design Element of the Santa Ana General Plan, and the City of Orange General Plan.

## C. FULL BUILD ALTERNATIVE

Table 4.13-4 lists the physical changes that would occur under the Full Build Alternative at the visual resources identified in applicable policy documents. As shown in the table, the result of the implementation of this alternative would be a decrease in visual quality at four of these resources. The improvements at the I-405/Seal Beach Boulevard interchange would result in a decrease in the amount of landscaping in this area. Seal Beach Boulevard is designated by the City of Seal Beach as a local scenic route, so the reduction in landscaping would be a substantial visual impact to a designated visual resource. Landscaping would be greatly reduced along the entire SR-22 freeway. The City of Garden Grove calls for enhancement of this, their namesake freeway. Instead, with the Full Build Alternative, visual quality would be reduced, a substantial visual impact. The substantial visual impacts to Almond Park and Willowick Municipal Golf Course are discussed in the previous section.

Table 4.13-4
IMPACTS TO VISUAL RESOURCES IDENTIFIED IN POLICY DOCUMENTS
FULL BUILD ALTERNATIVE

Visual Resource	Existing Visual Quality	Description of Visible Changes	Proposed Visual Quality
Seal Beach Boule- vard (Seal Beach)	moderately high	I-405 overpass would be rebuilt; removal of some landscaping at the I-405 interchange.	Moderate
Almond Park (Seal Beach)	high	Removal of houses, with one across the street from the park, to ac- commodate realigned frontage road; resulting open space would be visible and might not be maintained.	moderately high
SR-22 (Garden Grove Freeway) (Garden Grove)	low to moderately high	Removal of much of the landscaping along the freeway to allow widening; noise barriers in some areas.	Very low to moderate
Willowick Munici- pal Golf Course (Santa Ana)	high	New Pacific Electric Arterial in open space corridor adjacent to golf course; probable requirement for protective fencing to prevent wayward golf balls from landing in adjacent arterial; arterial would be elevated near eastern end of golf course.	moderately high

In addition to the visual resources identified in the policy documents applicable to the viewshed, the Full Build Alternative would not be compatible with several other policies related to visual quality, as described below.

Historic Agriculture/Orchard Design Theme. The following policy is included in the Orange County's *Master Plan of Freeway and Transit Corridor Improvements:* "Landscape patterns and structures should reflect the Historic Agricultural/Orchard design theme within the county Suburban Basin landscape unit." The county's Suburban Basin landscape unit includes nearly the entire viewshed (all except the area south of I-405 and west of the I-405/SR-22 interchange). The Historic Agriculture/Orchard design theme calls for row and grid landscape patterns to be expressed through landscape mass and color, wall textures, and geometric design structural ele-

ments. If this theme were not expressed throughout the majority of the Full Build Alternative, the project would not be compatible with this policy.

<u>Coastal Design Theme</u>. The following policy is included in the Orange County's *Master Plan of Freeway and Transit Corridor Improvements:* "Landscape patterns and structures should reflect the Coastal design theme within the county Northwest Bay landscape unit." The county's Northwest Bay landscape unit includes the portion of the SR-22/West Orange County Connection that is south of I-405 and west of the I-405/SR-22 interchange. The Coastal design theme calls for suggesting the water, coastal plants, and marine life found along the coast in freeway designs, emulating features specific to coastal landscapes such as cascading elements and undulating patterns. If this theme were not expressed throughout the majority of the Full Build Alternative, the project would not be compatible with this policy.

<u>Bikeways</u>. The following policy is included in the *Orange County Commuter Bikeways Strategic Plan:* "Design and construct bikeways in accordance with county and Caltrans standards in order to maximize safety and minimize potential conflicts with pedestrians and motor vehicles." Because the Full Build Alternative includes three new crossings of the Santa Ana River Trail, conflicts between pedestrians and motor vehicles could occur if grade-separated crossings are not provided (see above).

<u>Local Review of Designs</u>. The following policy is included in the *City of Garden Grove General Plan:* "The city should review landscape plans for new development to ensure that landscaping relates well to the scale of structures and land uses that it serves." If the city were not allowed to participate in the review of landscaping plans for the Full Build Alternative, the project would not be compatible with this policy.

<u>Freeway Landscaping</u>. The following policy is included in the *City of Garden Grove General Plan:* "The city should improve city appearance by requiring landscaping to screen, buffer, and unify new and existing development." The Full Build Alternative would remove much of the freeway landscaping in the right-of-way through Garden Grove, with little room left for replacement planting in many areas. This would be incompatible with the city's policy.

The following policy is included in the *Revised Draft Urban Design Element of the Santa Ana General Plan:* "Landscaping will be promoted on freeway slopes." Along SR-22 through Santa Ana, much of the landscaping would be removed by the Full Build Alternative, with little area remaining for replacement landscaping. This would be incompatible with the city's policy.

The following policies are included in the City of Orange General Plan:

- "The city should encourage the state to provide freeway landscaping."
- "Existing plant resources in the city should be preserved and protected."

Because the Full Build Alternative would remove existing freeway landscaping throughout much of the city of Orange, it would be incompatible with these policies.

The Caltrans *Project Development Procedures Manual* includes these policies related to freeway landscaping:<sup>3</sup>

- "Destruction of desirable vegetation should be avoided if possible, or minimized."
- "Provision for watering and establishment of replacement planting should be considered."
- "Preservation and protection of existing trees and other desirable vegetation is encouraged. Caltrans will replace highway plants that are damaged or removed by state highway construction activity. If there is limited space for replacement planting, replacement planting may be installed outside the limits of the highway project or outside the state right-of-way, but within the community."

<sup>&</sup>lt;sup>3</sup> Caltrans documents cited herein are available at Caltrans, District 12.

"If practical, plants will be used as integral components of noise barriers in order to discourage graffiti and resolve other visual issues."

The Caltrans *Plant Setback and Spacing Guide* also includes the following policy: "Minimum setbacks should not be reduced unless special circumstances or unusual site conditions warrant adjustment. Tree setbacks should never be reduced. All safety requirements must be met."

Finally, the Caltrans Highway Design Manual includes these relevant policies:

- "Planting and irrigation systems should be designed to achieve a balance between aesthetics, safety, maintainability, cost-effectiveness, and resource conservation. Planting should be responsive to local community goals."
- "Highway planting shall integrate the facility with adjacent communities."
- "Highway planting shall buffer objectionable views of the facility from adjacent homes, schools, parks, etc."
- "Highway planting shall soften visual impacts of large structures or graded slopes."
- "Highway planting shall screen objectionable or distracting views and frame or enhance good views."
- "Highway planting shall provide visually attractive interchanges and entrances to communities."
- "Materials and planting compositions should be visually compatible with local indigenous plant communities or surrounding landscape plantings."
- "Plantings should be designed according to the perspective of the viewer, particularly regarding orientation and scale."
- "Contour grading, with careful preservation and enhancement of existing plants and natural features, should be integrated into the overall composition."

The Full Build Alternative would remove a large amount of freeway landscaping, and in many cases there would be little space available for replacement landscaping, either within the right-of-way or in the adjacent densely developed properties. Thus, it is unlikely that all of the recommendations of the Caltrans policy documents can be fulfilled within the design of the Full Build Alternative. Thus, this alternative would be incompatible with many of the Caltrans freeway landscaping policies.

<u>Visual Enhancement</u>. The following policy is included in the *City of Garden Grove General Plan:* "The city should work with Caltrans to provide and maintain an attractive freeway environment within Garden Grove." The Full Build Alternative would remove much of the freeway landscaping in the right-of-way through Garden Grove, with little room left for replacement planting in many areas. This would be incompatible with the city's policy.

The following policy is included in the *Revised Draft Urban Design Element of the Santa Ana General Plan:* "Projects must acknowledge and improve upon their surroundings with the use of creative architectural design, streetscape treatments, and landscaping." The Full Build Alternative would remove large amounts of freeway landscaping in Santa Ana, which is not an improvement of the surroundings. If creative architectural design, streetscape treatments, and landscaping were not included in the project design, it would be incompatible with this policy. (See also Pacific Electric Arterial Development Standards, below.)

<u>Pacific Electric Arterial Development Standards</u>. The following policies apply to the portion of the viewshed along the former Pacific Electric right-of-way south of Westminster Avenue. Santa Ana's *Final North Harbor Specific Plan* includes these policies:

- "The city should achieve a uniformly high-quality visual image throughout the North Harbor Specific Plan by implementation of consistent development standards and land use patterns."
- "The city should implement and maintain a systematic landscaping pattern and standards for both public and private land that is attractive, appropriate, and easily maintained."

• "The city should place major emphasis on improving the visual appearance of all arterial streets through an aggressive streetscape improvement program."

In the Revised Draft Urban Design Element of the Santa Ana General Plan, the city has the following policies applicable to the Pacific Electric Arterial:

- "Enhanced streetscapes, architectural themes, and landscaping are to be provided to visually strengthen the path and enhance adjacent development."
- "Maximize the use of street trees and parkway landscaping to create a pleasant travel experience and positive city image."
- "Scenic, historic, and attractive views along paths are to be preserved."
- "Gateways to Santa Ana must include unique and distinctive streetscape and development design, with the use of imaginative and distinctive features."

If the Full Build Alternative were not to include the appropriate *North Harbor Specific Plan* guidelines in the design of the Pacific Electric Arterial, it would not be compatible with these policies. Without enhancement and streetscapes described in the *Urban Design Element* included in the project design, this alternative would also be incompatible with the urban design policies. Because the Full Build Alternative would remove the historic Pacific Electric Santa Ana River Bridge, it would be incompatible with the policy related to preserving such views.

The Pacific Electric Arterial would represent a new gateway into Santa Ana, a direct link between points east and the heart of the city. Without the inclusion of unique and distinctive streetscaping in the design of the arterial, the Full Build Alternative would be incompatible with the city's policy related to gateways.

<u>Freeway On- and Off-Ramps</u>. The following policy is included in the *Revised Draft Urban Design Element of the Santa Ana General Plan:* "Freeway on- and off-ramps are expected to be land-scaped in a manner to create a sense of place and arrival." Both the Bristol Street/La Veta Avenue ramps (both directions) and the Grand Avenue ramps (eastbound only) are within Santa Ana. Under the Full Build Alternative, both of these interchanges would be redesigned. Without enhancement to create a sense of place and arrival, this alternative would be incompatible with this policy.

## D. REDUCED BUILD ALTERNATIVE

Table 4.13-5 lists the physical changes that would occur under the Reduced Build Alternative at the visual resources identified in applicable policy documents. As shown in the table, the result of the implementation of this alternative would be a decrease in visual quality at three of these resources. The improvements at the I-405/Seal Beach Boulevard interchange would result in a decrease in the amount of landscaping in this area. Seal Beach Boulevard is designated by the City of Seal Beach as a local scenic route, so the reduction in landscaping would be a substantial visual impact to a designated visual resource. Landscaping would be greatly reduced along the entire SR-22 freeway. The City of Garden Grove calls for enhancement of this, their namesake freeway. Instead, with the Reduced Build Alternative, visual quality would be reduced, a substantial visual impact. The substantial visual impacts to Almond Park are discussed in the previous section.

In addition to the visual resources identified in the policy documents applicable to the viewshed, the Reduced Build Alternative would not be compatible with several other policies related to visual quality, as described below.

<u>Historic Agriculture/Orchard Design Theme</u>. The following policy is included in the Orange County's *Master Plan of Freeway and Transit Corridor Improvements:* "Landscape patterns and structures should reflect the Historic Agricultural/Orchard design theme within the county Suburban Basin landscape unit." The county's Suburban Basin landscape unit includes nearly the entire viewshed (all except the area south of I-405 and west of the I-405/SR-22 interchange). The

Historic Agriculture/Orchard design theme calls for row and grid landscape patterns to be expressed through landscape mass and color, wall textures, and geometric design structural elements. If this theme were not expressed throughout the majority of the Reduced Build Alternative, the project would not be compatible with this policy.

Table 4.13-5
IMPACTS TO VISUAL RESOURCES IDENTIFIED IN POLICY DOCUMENTS
REDUCED BUILD ALTERNATIVE

Visual Resource	Existing Visual Quality	Description of Visible Changes	Proposed Visual Quality
Seal Beach Boule- vard (Seal Beach)	moderately high	I-405 overpass would be rebuilt; removal of some landscaping at the I-405 interchange.	Moderate
Almond Park (Seal Beach)	high	Removal of houses, with one across the street from the park, to ac- commodate realigned frontage road; resulting open space would be visible and might not be maintained.	moderately high
SR-22 (Garden Grove Freeway) (Garden Grove)	low to moderately high	Removal of much of the landscaping along the freeway to allow widening; noise barriers in some areas.	very low to moderate

<u>Coastal Design Theme</u>. The following policy is included in the Orange County's *Master Plan of Freeway and Transit Corridor Improvements:* "Landscape patterns and structures should reflect the Coastal design theme within the county Northwest Bay landscape unit." The county's Northwest Bay landscape unit includes the portion of the SR-22/West Orange County Connection that is south of I-405 and west of the I-405/SR-22 interchange. The Coastal design theme calls for suggesting the water, coastal plants, and marine life found along the coast in freeway designs, emulating features specific to coastal landscapes such as cascading elements and undulating patterns. If this theme were not expressed throughout the majority of the Reduced Build Alternative, the project would not be compatible with this policy.

<u>Bikeways</u>. The following policy is included in the *Orange County Commuter Bikeways Strategic Plan:* "Design and construct bikeways in accordance with county and Caltrans standards in order to maximize safety and minimize potential conflicts with pedestrians and motor vehicles." Because the Reduced Build Alternative includes two new crossings of the Santa Ana River Trail, conflicts between pedestrians and motor vehicles could occur if grade-separated crossings are not provided (see above).

<u>Local Review of Designs</u>. The following policy is included in the *City of Garden Grove General Plan:* "The city should review landscape plans for new development to ensure that landscaping relates well to the scale of structures and land uses that it serves." If the city were not allowed to participate in the review of landscaping plans for the Reduced Build Alternative, the project would not be compatible with this policy.

<u>Freeway Landscaping</u>. The following policy is included in the *City of Garden Grove General Plan*: "The city should improve city appearance by requiring landscaping to screen, buffer, and unify new and existing development." The Reduced Build Alternative would remove much of the freeway landscaping in the right-of-way through Garden Grove, with little room left for replacement planting in many areas. This would be incompatible with the city's policy.

The following policy is included in the *Revised Draft Urban Design Element of the Santa Ana General Plan:* "Landscaping will be promoted on freeway slopes." Along SR-22 through Santa Ana, much of the landscaping would be removed by the Reduced Build Alternative, with little area remaining for replacement landscaping. This would be incompatible with the city's policy.

The following policies are included in the City of Orange General Plan:

- "The city should encourage the state to provide freeway landscaping."
- "Existing plant resources in the city should be preserved and protected."

Because the Reduced Build Alternative would remove existing freeway landscaping throughout much of the city of Orange, it would be incompatible with these policies. (Note: Less landscaping would be removed within the city of Orange by the Reduced Build Alternative than the Full Build Alternative.)

The Caltrans *Project Development Procedures Manual* includes these policies related to freeway landscaping:

- "Destruction of desirable vegetation should be avoided if possible, or minimized."
- "Provision for watering and establishment of replacement planting should be considered."
- "Preservation and protection of existing trees and other desirable vegetation is encouraged.
  Caltrans will replace highway plants that are damaged or removed by state highway construction activity. If there is limited space for replacement planting, replacement planting may be installed outside the limits of the highway project or outside the state right-of-way, but within the community."
- "If practical, plants will be used as integral components of noise barriers in order to discourage graffiti and resolve other visual issues."

The Caltrans *Plant Setback and Spacing Guide* also includes the following policy: "Minimum setbacks should not be reduced unless special circumstances or unusual site conditions warrant adjustment. Tree setbacks should never be reduced. All safety requirements must be met."

Finally, the Caltrans *Highway Design Manual* includes these relevant policies:

- "Planting and irrigation systems should be designed to achieve a balance between aesthetics, safety, maintainability, cost-effectiveness, and resource conservation. Planting should be responsive to local community goals."
- "Highway planting shall integrate the facility with adjacent communities."
- "Highway planting shall buffer objectionable views of the facility from adjacent homes, schools, parks, etc."
- "Highway planting shall soften visual impacts of large structures or graded slopes."
- "Highway planting shall screen objectionable or distracting views and frame or enhance good views."
- "Highway planting shall provide visually attractive interchanges and entrances to communities."
- "Materials and planting compositions should be visually compatible with local indigenous plant communities or surrounding landscape plantings."
- "Plantings should be designed according to the perspective of the viewer, particularly regarding orientation and scale."
- "Contour grading, with careful preservation and enhancement of existing plants and natural features, should be integrated into the overall composition."

The Reduced Build Alternative would remove a large amount of freeway landscaping (though slightly less than the Full Build Alternative), and in many cases there would be little space available for replacement landscaping, either within the right-of-way or in the adjacent densely developed properties. Thus, it is unlikely that all of the recommendations of the Caltrans policy documents can be fulfilled within the design of the Reduced Build Alternative. Thus, this alternative would be incompatible with many of the Caltrans freeway landscaping policies.

<u>Visual Enhancement</u>. The following policy is included in the *City of Garden Grove General Plan:* "The city should work with Caltrans to provide and maintain an attractive freeway environment within Garden Grove." The Reduced Build Alternative would remove much of the freeway land-

scaping in the right-of-way through Garden Grove, with little room left for replacement planting in many areas. This would be incompatible with the city's policy.

The following policy is included in the *Revised Draft Urban Design Element of the Santa Ana General Plan:* "Projects must acknowledge and improve upon their surroundings with the use of creative architectural design, streetscape treatments, and landscaping." The Reduced Build Alternative would remove large amounts of freeway landscaping in Santa Ana, which is not an improvement of the surroundings.

<u>Freeway On- and Off-Ramps</u>. The following policy is included in the *Revised Draft Urban Design Element of the Santa Ana General Plan:* "Freeway on- and off-ramps are expected to be land-scaped in a manner to create a sense of place and arrival." The Bristol Street/La Veta Avenue ramps (both directions) are within Santa Ana. Under the Reduced Build Alternative, this interchange would be redesigned. Without enhancement to create a sense of place and arrival, this alternative would be incompatible with this policy.

# Thresholds of Significance for CEQA:

- Potential conflict with Orange County's Master Plan of Freeway and Transit Corridor Enhancements
- Inconsistency with Caltrans' visual policy

## A. NO BUILD ALTERNATIVE

The No Build Alternative would have no significant impact in keeping consistent with plans or policies.

#### B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

The TSM/Expanded Bus Service Alternative would have no significant impact in keeping consistent with plans or policies.

# C. FULL BUILD ALTERNATIVE

Landscaping would be greatly reduced along the entire SR-22 freeway. In addition to the visual resources identified in the policy documents applicable to the viewshed, the Full Build Alternative would not be compatible with several policies related to visual quality. After mitigation measures are implemented, it is anticipated that impacts to visual quality as they relate to plans and policies would be less that significant (see VIS-FB-5, VIS-FB-6, VIS-FB-7, VIS-FB-8, and VIS-FB-9).

#### D. REDUCED BUILD ALTERNATIVE

Landscaping would be greatly reduced along the entire SR-22 freeway. In addition to the visual resources identified in the policy documents applicable to the viewshed, the Reduced Build Alternative would not be compatible with several other policies related to visual quality. With mitigation measure applied, it is anticipated that visual impacts to visual quality as they relate to plans and policies would be less than significant (see VIS-FB-5, VIS-RB-6, VIS-RB-7, VIS-RB-9, VIS-RB-12, VIS-RB-13).

# 4.13.5 Impacts to Freeway Landscaping

## A. NO BUILD ALTERNATIVE

The No Build Alternative does not include construction other than that addressed in previous environmental documents. There would be no impacts to freeway landscaping.

## B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

The TSM/Expanded Bus Service Alternative would include only minor construction. Therefore, no impacts to freeway landscaping would occur.

#### C. FULL BUILD ALTERNATIVE

In order to widen or realign the freeways within the SR-22/West Orange County Connection view-shed or to make improvements to interchanges, existing landscaping would need to be removed. Approximately 100 hectares (250 acres) or approximately 66 percent of the existing landscaping within the viewshed would be removed by the Full Build Alternative. In many areas, such as through much of Garden Grove, almost all of the landscaping would be removed under the Full Build Alternative, except at interchanges. Where the freeway would be elevated and noise barriers would be constructed, the noise barriers would be placed at the edge of the freeway shoulder, because placement further away from the shoulder (and necessarily further down the embankment) would eliminate or reduce the noise-reducing qualities of the noise barrier. In these areas, there would be no area to replant (except for outside the freeway). Figure 4.13-4 shows this impact.

There are some areas where there is little or no existing landscaping, especially in the vicinity of the I-5/SR-22 interchange and on SR-55, due to past construction. Along I-605 and I-405, the existing landscaping is not as dense, again because of past improvements.

The former Pacific Electric right-of-way is vegetated mostly with grasses and small plants. These plants would be removed by the Full Build Alternative, but it would result in negligible visual impact.

## D. REDUCED BUILD ALTERNATIVE

In order to widen or realign the freeways within the SR-22/West Orange County Connection view-shed or to make improvements to interchanges, existing landscaping would need to be removed. Approximately 90 hectares (220 acres) or approximately 60 percent of the existing landscaping within the viewshed would be removed by the Reduced Build Alternative. (Note: This is slightly less than the 66 percent of the landscaping removed by the Full Build Alternative. Many of the elements that are not part of the Reduced Build Alternative are located within areas with very little landscaping, such as the former Pacific Electric right-of-way, the I-5/SR-22 interchange, and the SR-55. Thus, the impacts to freeway landscaping under the Reduced Build Alternative would not be much different than under the Full Build Alternative.) In many areas, such as through much of Garden Grove, almost all of the landscaping would be removed under the Reduced Build Alternative, except at interchanges. Where the freeway would be elevated and noise barriers would be constructed, the noise barriers would be placed at the edge of the freeway shoulder, because placement further away from the shoulder (and necessarily further down the embankment) would eliminate or reduce the noise-reducing qualities of the noise barrier. In these areas, there would be no area to replant (except for outside the freeway). Figure 4.13-4 shows this impact.

Along I-605 and I-405, the existing landscaping is not as dense because of past improvements that removed the planting.

# Thresholds of Significance for CEQA:

- Loss of freeway landscaping
- Replacement of landscaping with hard surfaces such as soundwalls and structures

#### A. NO BUILD ALTERNATIVE

Under the No Build Alternative, there would be no loss or replacement of landscaping. Therefore, impacts to freeway landscaping under the No Build alternative would not be significant.

#### B. TSM/REDUCED BUILD ALTERNATIVE

The TSM/Expanded Bus Service Alternative would include only minor construction. It is anticipated that impacts to freeway landscaping would not be significant.

#### C. FULL BUILD ALTERNATIVE

Widening and realignment of SR-22 would require the removal of approximately 66 percent of existing vegetation. In areas where the freeway would be elevated and noise barriers would be constructed there would be no replanting. Impacts to freeway vegetation are expected to be potentially significant for the Full Build Alternative.

#### D. REDUCED BUILD ALTERNATIVE

Widening and realignment of SR-22 would require the removal of approximately 60 percent of existing vegetation. In areas where the freeway would be elevated and noise barriers would be constructed there would be no replanting. Impacts to freeway vegetation are expected to be potentially significant for the Reduced Build Alternative.

# 4.13.6 Impacts to Freeway-Oriented Signage

#### A. NO BUILD ALTERNATIVE

The No Build Alternative does not include construction other than that addressed in previous environmental documents. There would be no impacts to freeway-oriented signage.

## B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

The TSM/Expanded Bus Service Alternative does not include right-of-way changes. There would be no impacts to freeway-oriented signage.

## C. FULL BUILD ALTERNATIVE

The Full Build Alternative would include widening of existing roadways or realignment of interchanges that would result in the removal of eight signs that are oriented to viewers on the freeways. One of these signs is a free-standing billboard, not associated with the property on which it sits. For four of the signs removed, the widening would also remove the businesses that they advertise. Three additional signs would be obstructed from view by elevated structures proposed under the Full Build Alternative. Table 4.13-6 lists the signs that would be affected by the Full Build Alternative.

# Table 4.13-6 IMPACTS TO FREEWAY-ORIENTED SIGNS FULL BUILD ALTERNATIVE

Sign	Impact

Arco Gas Station Euclid St., Garden Grove	Removal of business and freestanding, on-site sign to accommodate SR-22 widening.
Shell Gas Station Euclid St., Garden Grove	Obstruction of view for eastbound traffic of freestanding, on-site sign due to elevated off-ramp to Pacific Electric Arterial (but would be visible from connector).
Garden Grove Storage Euclid St., Garden Grove	Obstruction of view for eastbound traffic of wall-mounted sign due to elevated off-ramp to Pacific Electric Arterial (but would be visible from connector).
Standard Finance Trask Ave., Garden Grove	Removal of business and wall-mounted sign to accommodate SR-22 widening.
Allspace Storage Trask Ave., Garden Grove	Obstruction of view for westbound traffic of freestanding, on-site sign due to elevated on-ramp from Pacific Electric Arterial (but would be visible from connector).
Love's Restaurant Harbor Blvd., Garden Grove	Removal of freestanding, on-site sign to accommodate realigned sidewalk.

# Table 4.13-6 (continued) IMPACTS TO FREEWAY-ORIENTED SIGNS FULL BUILD ALTERNATIVE

Sign	Impact
AM/PM-Arco Gas Station	Removal of freestanding, on-site sign to accommodate Harbor Boulevard
Harbor Blvd., Garden Grove	street widening.
ABC Bus Sign	Removal of freestanding, on-site sign to accommodate SR-22 widening.
Garden Grove Blvd., Garden Grove	
Billboard	Freestanding billboard removed to accommodate realignment of Bristol
Near eastbound Bristol St./La Veta	Street/La Veta Avenue eastbound off-ramp.
Ave. off-ramp, Santa Ana	
Discount Movers	Removal of businesses and building-mounted, on-site sign to accommodate
Sherwin Williams Paint	realignment of Bristol Street/La Veta Avenue eastbound off-ramp.
Bristol St., Santa Ana	
Planned Parenthood	Removal of business and building-mounted, on-site sign to accommodate new
Tustin Ave., Orange	and realigned SR-22/SR-55 connectors.

# D. REDUCED BUILD ALTERNATIVE

The Reduced Build Alternative would include widening of existing roadways or realignment of interchanges that would result in the removal of five signs that are oriented to viewers on the freeways. For two of the signs removed, the widening would also remove the businesses that they advertise. Table 4.13-7 lists the signs that would be affected by the Reduced Build Alternative.

Table 4.13-7
IMPACTS TO FREEWAY-ORIENTED SIGNS
REDUCED BUILD ALTERNATIVE

Sign	Impact
Arco Gas Station	Removal of business and freestanding, on-site sign to accommodate SR-22
Euclid St., Garden Grove	widening.
Standard Finance	Removal of business and wall-mounted sign to accommodate SR-22 widen-
Trask Ave., Garden Grove	ing.
Love's Restaurant	Removal of freestanding, on-site sign to accommodate realigned sidewalk.
Harbor Blvd., Garden Grove	
AM/PM-Arco Gas Station	Removal of freestanding, on-site sign to accommodate Harbor Boulevard
Harbor Blvd., Garden Grove	street widening.
ABC Bus Sign	Removal of freestanding, on-site sign to accommodate SR-22 widening.
Garden Grove Blvd., Garden Grove	

## Thresholds of Significance for CEQA:

Reduction in visibility of or loss of freeway-oriented signage

## A. NO BUILD ALTERNATIVE

The No Build Alternative would have no significant impacts to freeway-oriented signage.

# B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

The TSM/Expanded Bus Service Alternative does not include right-of-way changes. There would be no significant impacts to freeway-oriented signage.

C. FULL BUILD ALTERNATIVE

Signs removed or those visually disrupted as a result of the Full Build Alternative would be relocated if possible (see VIS-FB-14 and VIS-FB-15). Potentially significant impacts to freeway-oriented signage is expected to occur.

#### D. REDUCED BUILD ALTERNATIVE

Loss of freeway-oriented signage due to the Reduced Build Alternative would be relocated if possible (see VIS-RB-14). It is anticipated that impacts to freeway-oriented signage would be less that significant.

# 4.13.7 Impacts Related to Shade, Shadow, Light, and Glare

Shade is defined as an area blocked from direct sunlight for at least several hours during the day. Construction or removal of large structures can result in changes in shade patterns, which can affect the visual environment both directly (the visual environment is darker or brighter) or indirectly (the darker/brighter environment changes landscape viability). Shadows are more temporary shade features created by smaller structures. Shadows do not typically result in indirect impacts to vegetation; their impact is generally minimal unless the structure creates an unusual or disruptive shadow pattern.

Light impacts occur when there are new sources of light (such as new streetlights) or when existing lights are removed. Glare impacts occur when light is directed from the light source directly into the eyes of viewers, either directly from the source (such as headlights) or by reflection (such as sunlight reflected from a "glass box"-type building).

#### A. NO BUILD ALTERNATIVE

The No Build Alternative would include only minor construction. There would be no impacts related to shade, shadow, light, or glare.

## B TSM/EXPANDED BUS SERVICE ALTERNATIVE

The TSM/Expanded Bus Service Alternative would include only minor construction. There would be no impacts related to shade, shadow, light, or glare.

## C. FULL BUILD ALTERNATIVE

<u>Shade</u>. The Full Build Alternative would slightly increase the areas shaded by overhead structures because some of these structures would be widened and there would be new overhead structures. This change would be most noticeable in the vicinity of the Santa Ana River crossings where the SR-22 mainline bridge would be widened and two new structures would be constructed. New areas of nearly 100-percent shade would be created. Because of the new area shaded, however, this impact would not be substantial.

<u>Shadow</u>. No unusual or disruptive shadow patterns would be created by the Full Build Alternative.

<u>Light</u>. New light sources would be minimal for the Full Build Alternative with the exception of the vicinity of the Pacific Electric Arterial. At this location, most of the empty right-of-way is currently unlit. New streetlights would be installed along the arterial. Although much of the right-of-way is bordered by industrial uses or by areas primarily used during the day (such as the golf course and intermediate school), there are some homes and mobile homes bordering the alignment that would be affected by the new light levels. This would be a substantial visual impact.

<u>Glare</u>. There would be no impact associated with glare from the Full Build Alternative. The alignment would be generally straight or gently curving, resulting in headlight paths that would be

contained within the right-of-way. Even on the Pacific Electric Arterial, headlight glare would not be an issue because of the lack of turning movements (vehicles cannot turn onto or off of the arterial except on existing streets at the eastern termini). The Full Build Alternative would not include reflective elements nor locate facilities in new areas affected by reflected glare.

#### D. REDUCED BUILD ALTERNATIVE

<u>Shade</u>. The Reduced Build Alternative would slightly increase the areas shaded by overhead structures because some of these structures would be widened and there would be new overhead structures. This change would be most noticeable in the vicinity of the Santa Ana River crossings where the SR-22 mainline bridge would be widened and two new structures would be constructed. New areas of nearly 100-percent shade would be created. Because of the new area shaded, however, this impact would not be substantial.

<u>Shadow</u>. No unusual or disruptive shadow patterns would be created by the Reduced Build Alternative.

<u>Light</u>. New light sources would be minimal for the Reduced Build Alternative.

<u>Glare</u>. There would be no impact associated with glare from the Reduced Build Alternative. The alignment would be generally straight or gently curving, resulting in headlight paths that would be contained within the right-of-way. The Reduced Build Alternative would not include reflective elements and would not locate facilities in new areas affect by reflected glare.

## Thresholds of Significance for CEQA:

New light sources or light levels

#### A. NO BUILD ALTERNATIVE

The No Build Alternative would have no significant impacts related to light.

#### B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

There is only minor construction associated with the TSM/Expanded Bus Service Alternative, therefore, there would be no significant impacts related to light.

# C. FULL BUILD ALTERNATIVE

New sources of light would occur along the former Pacific-Electric right-of-way and new overhead structures would slightly increase the amount of shade. Impacts associated with the addition of light sources is expected to be significant.

## D. REDUCED BUILD ALTERNATIVE

The Reduced Build alternative would have less than significant impacts related to light sources since such sources would be minimal under this alternative.

# 4.13.8 Mitigation

# A. NO BUILD ALTERNATIVE

None required.

# B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

None required.

## C. FULL BUILD ALTERNATIVE

<u>VIS-FB-1</u>. At locations where residential structures are removed and neighboring residences and/or parks are exposed to new views of the freeways or freeway structures or intactness of the neighborhood is affected, additional landscaping will be provided within the right-of-way or in remnant parcels remaining after acquisition of the homes. This landscaping would be designed to provide a transition between the residential level of landscaping of the surrounding properties and the freeway and to create a buffer between the freeway and the residences, but not necessarily to completely screen the freeway from view. All features of the residential community that can be retained, especially sidewalks and street trees, will be retained.

<u>VIS-FB-2</u>. As much as possible, existing landscaping within the state right-of-way will be preserved. Areas needed for construction will be minimized where feasible while maintaining safety for construction workers and the public.

<u>VIS-FB-3</u>. Under the direction of the Caltrans District Landscape Architect, where freeway landscaping is removed due to the widening of the freeway or the realignment of ramps, and where enough right-of-way is available, replacement landscaping will be provided. If necessary, available areas outside the state right-of-way will be used for replacement landscaping, if long-term maintenance by the local community can be assured. Replacement planting will be provided with sufficient irrigation and maintenance to ensure survival.

<u>VIS-FB-4</u>. Noise barriers and other large structures will be visually softened through the use of vines, at a minimum, with shrubs and trees used where sufficient right-of-way exists. This planting will be used to reduce the visual impact for both the viewers on the outside of the noise barriers (adjacent land uses) and for viewers on the freeways/arterial. Where there is no room for landscaping because the barrier is placed at the edge of shoulder, but there is available land on the outside of the barrier, vines will be planted behind the barrier and trained to spill over the top of the barrier. Enhanced noise barrier design, such as bas-relief designs, will be used, similar to those existing along SR-22 and SR-55 in the project study area. Graffiti-resistant surfaces will be used.

<u>VIS-FB-5</u>. California native wildflowers will be included at a minimum level of 0.25 percent of total planting and irrigation budget.

<u>VIS-FB-6</u>. For those portions of the Full Build Alternative within Orange County's Suburban Basin landscape unit, the Historic Agricultural/Orchard design theme will be incorporated into the final design. This design theme centers on row-and-grid landscape patterns similar to those in historic agricultural fields and orchards. These landscape patterns will be expressed through landscape mass and color, wall textures, and geometric design of structural elements. Elements of this landscape theme will be expressed as follows:

- Grove areas will be planted, with single species planted in rows or grids in large planting areas, such as within interchanges.
- Rows of single species for planting in areas where there is only room for a single row of
  planting. Plants will be selected and spaced so that their mature size will not allow them to
  completely grow together into a continuous hedge, but rather they will continue to portray a
  pattern of individual plants in a row.
- Grid patterns of single species for planting in areas where there is room for multiple rows of planting. Plants will be selected and spaced so that their mature size will not allow them to completely grow together into a continuous mass, but rather they will continue to portray a pattern of individual plants in a grid.

- Plant species selected will have a natural compact and symmetrical form, so that the patterns
  created by the landscape plan can be maintained without substantial maintenance required.
- Where the freeway is depressed within the surrounding area and there is sufficient room, level
  or slightly sloping graded planes (slightly inclined towards the freeway) will be provided, held
  in place by retaining walls if necessary. Undulating berms are not appropriate in this county
  landscape unit.
- Surface textures on retaining walls and noise barriers will incorporate gridded or "row" geometric patterns, reminiscent of historical agricultural patterns.
- Colors used in the landscape will be in yellow, orange, and green tones, reminiscent of the agricultural and orchard products.

<u>VIS-FB-7</u>. For those portions of the Full Build Alternative within Orange County's Northwest Bay landscape unit, the Coastal design theme will be incorporated into the final design. This design theme suggests water, coastal plants, and marine life found along the coast. This theme will be expressed through cascading elements and undulating patterns. Elements of this landscape theme will include:

- Palms will be clustered at accent points.
- Cascading vines will be used on walls where there is sufficient space.
- Shrub plantings will be in layered masses where there is sufficient room, reminiscent of waves or sand dunes.
- Colored gravel patterns will be used in areas where planting is not practical or to accent large planted areas, such as in interchanges. The patterns should be reminiscent of overlapping water on the beach.
- Large boulders will be incorporated into the interchanges where there is adequate room to emulate a rocky coastal shoreline.
- Berms will be used within areas of expanded rights-of-way to suggest dunes or escarpments.
- Ocean elements will be incorporated into structural forms, retaining walls, and noise barriers.
- Colors used in the landscape will be in blue or "cool," light brown, and red tones reminiscent of ocean, sand, and sunsets.

<u>VIS-FB-8</u>. For any new or widened crossings of the Santa Ana River trail, grade separations will be provided in order to maintain the trail's continuity.

<u>VIS-FB-9</u>. The project designers will work with Caltrans and the local governments to avoid the removal of trees to the maximum extent possible and to provide freeway landscaping consistent with local policies and to integrate the facility with adjacent communities. Entrances to cities within the study area will be enhanced. Cooperative agreements will be reached for the funding, installation, and maintenance of this landscaping in excess of Caltrans standard landscaping.

<u>VIS-FB-10</u>. Where possible, views of the freeway and associated elements, including noise barriers, will be buffered from homes, schools, parks, and similar uses by planting.

<u>VIS-FB-11</u>. Where possible, objectionable views from the freeway, such as of open storage for industrial uses, will be screened from view by use of highway planting. Replacement planting outside the right-of-way will be used for this purpose if maintenance by local communities or land owners can be assured.

<u>VIS-FB-12</u>. Highway planting will be appropriately scaled and oriented to the freeway viewer.

<u>VIS-FB-13</u>. Highway planting will be selected based on maximum benefit for the long-term costs involved. Plant materials that can withstand the difficult roadside conditions and survive with limited irrigation and minimal maintenance will be used. Use of native California plants is encouraged. Other considerations recommended in the *Highway Design Manual* will be incorporated into designs, including avoidance of brittle trees, mono-cultures, edible plants, and poisonous plants.

<u>VIS-FB-14</u>. Signage removed due to the widening of the freeway, realignment of ramps, or addition of travel lanes on associated arterial streets, will be relocated outside of state right-of-way but within the associated business property and within view of the freeway. If the signage removed is related to businesses that would also be displaced, the signage will not be replaced. Replaced signage will be consistent with local zoning ordinances, even if the existing signage is not. Bill-boards will be replaced only if there is suitable land available for their relocation and if local policy supports such use.

<u>VIS-FB-15</u>. Signage obstructed by freeway improvements will be relocated, where feasible, to take advantage of freeway visibility. At no time, however, will local zoning ordinance requirements related to the height and location of signs be violated.

<u>VIS-FB-16</u>. Screening vegetation will be used to visually separate the adjacent residential, recreational, and school uses from the new arterial in the Pacific Electric right-of-way as much as possible to compensate for the loss of open space. This landscaping will be consistent with the streetscape plans of the City of Santa Ana (including the North Harbor Specific Plan, where applicable). Caltrans and the City of Santa Ana will work together to incorporate Santa Ana visual policies into the arterial design.

<u>VIS-FB-17</u>. Lighting along the Pacific Electric arterial will be limited as much as safely possible, directed away from adjacent properties, and hooded to limit the amount of additional light falling on the adjacent properties.

#### D. REDUCED BUILD ALTERNATIVE

<u>VIS-RB-1</u>. At locations where residential structures are removed and neighboring residences and/or parks are exposed to new views of the freeways or freeway structures or intactness of the neighborhood is affected, additional landscaping will be provided within the right-of-way or in remnant parcels remaining after acquisition of the homes. This landscaping would be designed to provide a transition between the residential level of landscaping of the surrounding properties and the freeway and to create a buffer between the freeway and the residences, but not necessarily to completely screen the freeway from view. All features of the residential community that can be retained, especially sidewalks and street trees, will be retained.

<u>VIS-RB-2</u>. As much as possible, existing landscaping within the state right-of-way will be preserved. Areas needed for construction will be minimized where feasible while maintaining safety for construction workers and the public.

<u>VIS-RB-3</u>. Where freeway landscaping is removed due to the widening of the freeway or the realignment of ramps, and where enough right-of-way is available, replacement landscaping will be provided on a one-to-one ratio. If necessary, available areas outside the state right-of-way will be used for replacement landscaping, if long-term maintenance by the local community can be assured. Replacement planting will be provided sufficient irrigation and maintenance to ensure survival.

<u>VIS-RB-4</u>. Noise barriers and other large structures will be visually softened through the use of vines, at a minimum, with shrubs and trees used where sufficient right-of-way exists. This planting will be used to reduce the visual impact for both the viewers on the outside of the noise barriers (adjacent land uses) and for viewers on the freeways/arterial. Where there is no room for landscaping because the barrier is placed at the edge of shoulder, but there is available land on the outside of the barrier, vines will be planted behind the barrier and trained to spill over the top of the barrier. Enhanced noise barrier design, such as bas-relief designs, will be used, similar to those existing along SR-22 and SR-55 in the project study area. Graffiti-resistant surfaces will be used.

<u>VIS-RB-5</u>. California native wildflowers will be included at a minimum level of 0.25 percent of total planting and irrigation budget.

<u>VIS-RB-6</u>. For those portions of the Reduced Build Alternative within Orange County's Suburban Basin landscape unit, the Historic Agricultural/Orchard design theme will be incorporated into the final design. This design theme centers on row-and-grid landscape patterns similar to those in historic agricultural fields and orchards. These landscape patterns will be expressed through landscape mass and color, barrier textures, and geometric design of structural elements. Elements of this landscape theme will be expressed as follows:

- Grove areas will be planted, with single species planted in rows or grids in large planting areas, such as within interchanges.
- Rows of single species for planting in areas where there is only room for a single row of planting. Plants will be selected and spaced so that their mature size will not allow them to completely grow together into a continuous hedge, but rather they will continue to portray a pattern of individual plants in a row.
- Grid patterns of single species for planting in areas where there is room for multiple rows of
  planting. Plants will be selected and spaced so that their mature size will not allow them to
  completely grow together into a continuous mass, but rather they will continue to portray a
  pattern of individual plants in a grid.
- Plant species selected will have a natural compact and symmetrical form, so that the patterns created by the landscape plan can be maintained without substantial maintenance required.
- Where the freeway is depressed within the surrounding area and there is sufficient room, level
  or slightly sloping graded planes (slightly inclined towards the freeway) will be provided, held
  in place by retaining walls if necessary. Undulating berms are not appropriate in this county
  landscape unit.
- Surface textures on retaining walls and noise barriers will incorporate gridded or "row" geometric patterns, reminiscent of historical agricultural patterns.
- Colors used in the landscape will be in yellow, orange, and green tones, reminiscent of the agricultural and orchard products.

<u>VIS-RB-7</u>. For those portions of the Reduced Build Alternative within Orange County's Northwest Bay landscape unit, the Coastal design theme will be incorporated into the final design. This design theme suggests water, coastal plants, and marine life found along the coast. This theme will be expressed through cascading elements and undulating patterns. Elements of this landscape theme will include:

- Palms will be clustered at accent points.
- Cascading vines will be used on walls where there is sufficient space.
- Shrub plantings will be in layered masses where there is sufficient room, reminiscent of waves or sand dunes.
- Colored gravel patterns will be used in areas where planting is not practical or to accent large planted areas, such as in interchanges. The patterns should be reminiscent of overlapping water on the beach.
- Large boulders will be incorporated into the interchanges where there is adequate room to emulate a rocky coastal shoreline.
- Berms will be used within areas of expanded rights-of-way to suggest dunes or escarpments.
- Ocean elements will be incorporated into structural forms, retaining walls, and noise barriers.
- Colors used in the landscape will be in blue or "cool," light brown, and red tones reminiscent of ocean, sand, and sunsets.

<u>VIS-RB-8</u>. For any new or widened crossings of the Santa Ana River trail, grade separations will be provided in order to maintain the trail's continuity.

<u>VIS-RB-9</u>. The project designers will work with Caltrans and the local governments to provide freeway landscaping consistent with local policies and to integrate the facility with adjacent com-

munities. Entrances to cities within the study area will be enhanced. Cooperative agreements will be reached for the funding, installation, and maintenance of this landscaping.

<u>VIS-RB-10</u>. Where possible, views of the freeway and associated elements, including noise barriers, will be buffered from homes, schools, parks, and similar uses by planting.

<u>VIS-RB-11</u>. Where possible, objectionable views from the freeway, such as of open storage for industrial uses, will be screened from view by use of highway planting. Replacement planting outside the right-of-way will be used for this purpose if maintenance by local communities or land-owners can be assured.

VIS-RB-12. Highway planting will be appropriately scaled and oriented to the freeway viewer.

<u>VIS-RB-13</u>. Highway planting will be selected based on maximum benefit for the long-term costs involved. Plant materials that can withstand the difficult roadside conditions and survive with limited irrigation and minimal maintenance will be used. Use of native California plants is encouraged. Other considerations recommended in the *Highway Design Manual*<sup>4</sup> will be incorporated into designs, including avoidance of brittle trees, mono-cultures, edible plants, and poisonous plants.

<u>VIS-RB-14</u>. Signage removed due to the widening of the freeway, realignment of ramps, or addition of travel lanes on associated arterial streets, will be relocated outside of state right-of-way but within the associated business property and within view of the freeway. If the signage removed is related to businesses that would also be displaced, the signage will not be replaced. Replaced signage will be consistent with local zoning ordinances, even if the existing signage is not.

# 4.13.9 Residual Impacts After Mitigation

A. NO BUILD ALTERNATIVE

None.

B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

None.

## C. FULL BUILD ALTERNATIVE

In locations where houses are removed, the visual impact to the remaining residential viewers cannot be fully mitigated and a residual visual impact would remain. Figure 4.13-7 illustrates the Suburban Key Viewpoint after mitigation.

The removal of landscaping for widening of the freeways and realignment of interchanges cannot be fully mitigated due to the lack of available area for replanting either within or outside the future right-of-way. The loss of landscaping would be a substantial visual impact. Figure 4.13-6 illustrates the View From the Freeway after mitigation.

The preclusion of the proposed class I trail in the former Pacific Electric right-of-way would be a impact that cannot be mitigated (see Sections 4.10 and 9.0). Use of the right-of-way would also lead to the following visual impacts that also cannot be reduced to less than substantial after mitigation: the removal of open space, the addition of new light sources, and the removal of the historic Pacific Electric Santa Ana River Bridge.

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<sup>&</sup>lt;sup>4</sup> Available at Caltrans, District 12.

The addition of elevated connectors to and from the Pacific Electric Arterial would also result in unmitigable blockage of views of signs at the following businesses: the Shell Gas Station, Garden Grove Storage, and Allspace Storage.

## D. REDUCED BUILD ALTERNATIVE

Fewer houses would be removed under the Reduced Build Alternative than with the Full Build Alternative, but the impacts related to the visual disruption of neighborhoods would occur in some locations. The visual impact to the remaining residential viewers cannot be fully mitigated and a residual visual impact would remain.

The removal of landscaping for widening of the freeways and realignment of interchanges cannot be fully mitigated due to the lack of available area for replanting either within or outside the future right-of-way. The loss of landscaping would be a substantial visual impact. Figure 4.13-7 illustrates the View From the Freeway after mitigation.



Existing



Mitigated: Full Build Alternative

SR-22 / West Orange County Connection Project
Suburban Key Viewpoint - Existing and Mitigated Full Build Alternative
View

Figure 4.13-6



Existing



Mitigated: Full Build Alternative

SR-22 / West Orange County Connection Project
View From the Freeway - Existing and Mitigated Full Build Alternative
View

Figure 4.13-7